

# IEEE Iran Section Report

Feb 2024

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### Section Vitality

The last elections were in December 2022, with Prof. Hossein Askarian Abyaneh elected as chair and Prof. Vahid Ahmadi elected as Vice-Chair. Also, Dr. Hadi Ali Akbarian and Dr. Mohammad Reza Yousefi were the Secretary and Treasurer, respectively. It should be noted that 615 members participated in this election. Iran Section's next election is in December 2024. Some activities will be conducted in order to make the Vice-Chair become the next Chair; however, it depends on the final results of the elections. The Iran Section holds meetings at the end of each month. Since the last report, four meetings have been held focusing on the section's strategic plan (one of the most important tasks in which all committees, affinity groups, and chapters are involved in developing the plan), reviewing award nominees, and planning for the 14<sup>th</sup> Iran Section Awards Ceremony.

### Students

Currently, we have 58 Student Branches (SB) ([Link](#)). Some of the members of SBs are members of the Students Activities Committee (SAC) and all 15 committees of the Section which helps the section, body to be more dynamic.

- We held the 14<sup>th</sup> IEEE Iran Section Awards Ceremony (February 2024). This meeting is extremely important since it brings together the entire section and beyond, (Fig. 1)
- The 21st Annual Meeting with Student Branches Counselors and the IEEE Iran Section Executive Committee. In the presence of members of the student branches, instructors, advisors, and the executive committee, along with a visit to the Communication and Information Technology Research Institute, Feb. 2024, (Fig. 2)
- Achieving the position of the best counselor by the University of Tehran student branch, Feb. 2024.
- Active participation in R8 meetings
- Cooperation with the student scientific organization
- Revision of regulations for student awards, Feb. 2024
- Holding a meeting with the board of directors of all branches and counselors of the branches, Feb. 2024
- Compilation of regulations for the review of student conferences
- Active presence of SC students in assemblies, committees, and other parts of the Iran Section
- Support and design of the Upside-Down World podcast contest
- Cooperate in holding a series of scientific meetings, Dec. 2023, (Fig. 10)
- Cooperation in holding student workshops (Fig. 21)

### Affinity Groups

#### Establishing Planning Committee

This committee was created to perform the plans made in the 5-year strategic plan and their results. Consequently, this committee evaluates the plans, which are correlated to the scope of the strategic plan, under the responsibility of Dr. Khaki Sedigh.

#### Life Member:

**Establishing IEEE Iran Section Life Member Affinity Group (LMAG), Oct. 2023.**

The Petition form for establishing the IEEE Iran Section Life Member Affinity Group (LMAG) was submitted first online on November 11, 2022, and then on October 12, 2023, by email to the IEEE Petition Processing Office, including the names and signatures of six IEEE life members. This petition has been cleared by legal and compliance and is waiting for clarification from IEEE relative to any United States OFAC financial sanctions.

#### Young Professionals Committee:

- In the Young Professionals Committee of the IEEE Iran Section, we are excited to announce the **launch of a new podcast series titled "Inspiring Journeys."** In this podcast, we engage in enlightening conversations with accomplished and influential Iranians, both within and beyond our country's borders, who have made significant contributions to research fields relevant to IEEE. The purpose of this podcast is to serve as an audio repository of memories, life stories, and the

challenging yet rewarding paths taken by Iran's scientific pioneers. These narratives will be saved in our nation's scientific history, serving as a wellspring of inspiration for future generations. Moreover, it stands as one of the premier platforms for the transfer of knowledge from seasoned experts to young professionals. Dec 2023 – Now, (Fig. 8a-e)

- Provide tailored events and initiatives to support young professionals, fostering networking opportunities, career development, and leadership skills early in their careers. Additionally, offer online webinars presented by industry experts and reputable companies to help young professionals evaluate their career goals, enhance their skills, and expand their professional networks, March 2023, Jan 2024, (Figs. 8.f, 8.g)
- Introducing a new column in the IEEE Newsletter dedicated to representing the achievements of Young Professionals. In this column, we try to highlight the monthly accomplishments of Iranian young professionals, providing a platform for increased interaction and discussions within the community. Through this initiative, we aim to celebrate the successes of our members while fostering greater connections and collaboration among young professionals in Iran.
- Establishing connections and organizing meetings with various Young Professional (YP) branches across universities in Region 8. Given the proximity of the neighborhood to Turkey, we have facilitated meetings between young professionals from the Iran and Turkey sections, including universities such as Gazi University. These gatherings aim to foster dialogue and collaboration on shared projects and future opportunities for scientific cooperation among young professionals, (Fig 8.h)

### WIE:

The mission of WIE is to participate, encourage, and empower women in science and technology around the world, specifically in Iran. Our vision is a vibrant community of IEEE men and women who, collectively, use their diverse talents to innovate for the benefit of humanity.

Women in Engineering branch of IEEE Iran, under the management of Dr. Azimifar, to facilitate the status and career advancement of women in engineering and science and to promote efficient cooperation between engineers and scientists through the Women in Engineering (WIE) network.

### Activities done by WIE since the last report

- Collaboration and Interaction with the **Dubai** were side performed by the chair of the WIE committee.
- Holding a series of scientific meetings, Nov. 2023, (Fig. 4)
- WIE Conference, Fall 2023 (Fig. 11):  
The Autumn meeting of women in engineering was jointly organized by the women's branch of the IEEE Iran Association and the National Conference of Artificial Intelligence and Software Engineering at Shiraz University. Highly regarded female professors and engineers delivered six uplifting and professional talks. Over 100 academics and engineers attended the event. As expected, the summit was very well received.
- WIE Professional Development, 2023 (Fig. 16):  
Acknowledging 50 years of dedication to advancing engineering in Iran by the honored Mrs. Engineer Minoo Namatolah, distinguished emeritus of Shiraz University
- Generative AI for Women (Supported by the Ministry of ICT), Dec. 2023, (Fig. 24)  
It was initiated by 155 female team registrations and closed by awarding the 18 best innovative ideas using Gen AI.
- Leading Women in Engineering Webinar, Dec. 2023 (Fig. 13)
- Economic, Artistic, and Research Facilitating Ideas based on Generative Artificial Intelligence for Women, Events, Dec 2023, (Figs. 23,24)
- Event of Artificial Intelligence in Fashion, Sep. 2023, (Fig. 6)
- Economic simplifications for women in engineering and business seminars

### Educational Activities Committee (EAC)

- Key Concepts in the Blockchain Technology Workshop
- Deep Learning Workshop, Aug 2023.
- Hyperledger Fabric Technology Workshop
- How to Write a Research Paper Webinar
- Discover the Golden Point Webinar
- Lecture by Eng. Hassan Etaat, Career Path Design for Young Graduates
- Lecture by Dr. Mehdi Shami Zanjani on digital transformation
- Lecture by Dr. Karim Mohammadpour Aghdam, Industry Relations Panel
- Near Field Antenna Pattern Measurement Webinar
- Swarm Robotics in Oil Spill Monitoring and Cleanup Webinar
- Introduction to IEEE Women in Engineering
- Haptic Technology in Intraocular Surgeries Webinar
- The first course of workshops for managers and activists in the field of the Internet of Things with the LoRaWAN approach,

- Step-by-step principles for starting and developing a startup,
- Developing a business plan and model,
- Digital marketing,
- Legal issues of starting a business,
- Interpersonal Influence in Computer-Mediated Interactions.
- Speech by Maciej Borówka, Chair of the IEEE District 8 Student Activities Committee
- Speech by Prasanth Mohan, Student Awards Officer, IEEE MGA Student Activities Committee

## Chapters

- **Planning to establish two new chapters in Biomedical Engineering and Electron Devices**

Currently, we have 6 active Technical Chapters as follows:

- 1) Communications and Information Theory Chapter ([Link](#))
- 2) Control Systems Chapter ([Link](#))
- 3) Electromagnetics and Photonics Joint Chapter ([Link](#))
- 4) Power Chapter ([Link](#))
- 5) Electronic Circuits and Systems Joint Chapter ([Link](#))
- 6) Computer Engineering Joint Chapter ([Link](#))

## Activities done by Technical Chapters

- Control Chapter Periodical Meetings
  - Holding a series of scientific meetings, Dec. 2023, (Fig. 10)
  - Holding two virtual meetings to review and evaluate the following two international conferences:
    - ICROM 2023, 11th RSI International Conference on Robotics and Mechatronics.
    - ICCIA 2023, 9th International Conference on Control, Instrumentation, and Automation.
  - Holding four virtual meetings to evaluate IEEE Awards regarding, Dec. 2023-Feb. 2024:
    - The best lifetime research award
    - The best candidate for the Prof. Jabehdar award
    - The best candidate for the Prof. Caro Lucas award
    - The best M.Sc. thesis award
  - Holding a scientific lecture at two medical conferences regarding the use of artificial intelligence in the diagnosis of diseases
  - The presence of the representative of the specialized control assembly in the standard committee (Dr. Ali Akbar Afzalian)
- Electromagnetic and Photonic Chapter Periodical Meetings:
  - An Exceptional Lightning Research Facility in the Swiss Alps by Prof. Farhad Rachidi, Feb. 2024, (Fig. 14)
  - A Holy Grail Quest: The Concept of Stored Electromagnetic Energy by Prof. Guy A. E. Vandenbosch, Nov. 2023, (Fig. 5)
- Computer Chapter Periodical Meetings:
  - Holding two webinars on security and the legal challenges of privacy and data for 5 hours, Aug 2023.
  - Holding a soft skills training webinar by Dr. Taghi Yare for 2 hours, Dec. 2023, (Fig. 7)
  - Compilation and finalization of Dr. Anwari's award regulations and presentation of the first award this year, April 2023.
  - Compilation and finalization of regulations for computer student chapters and their approval, May. 2023.
  - Developing cooperation guidelines with institutions to carry out the project, June 2023.
  - Developing guidelines for the implementation of joint projects with the Research Institute of Communication and Information Technology, May 2023
  - Evaluation and scoring of IEEE annual award applicants and presentation to the awards committee, Jan. 2024
  - Evaluation of more than 10 conferences in the field of computer and information technology and presentation to the conference committee
  - Holding a "Persian text analysis in social networks" event, Oct. 2023 (Fig. 25):

The "Text Analysis in Persian Language on Social Networks" event, held at the Research Institute of ICT, aimed to boost Persian language presence online through AI tools. Organized by the ParsiAzma Lab and IEEE Iran Section, the team "StateOfTheArt@AUT" from Amirkabir University won the first prize of eighty million tomans. Addressing the challenge of Persian language processing in the digital realm, the ParsiAzma Lab, launched a year ago, focuses on utilizing the nation's academic expertise. This competition reflects their recent efforts.

- Power Chapter Periodical Meetings:
  - Round Table on Sustainable Electricity Supply, peak load, Feb. 2024, (Fig. 15a)
  - The 1<sup>st</sup> IEEE-Iran Section and IGMC General Meeting, AI Application in Modern Power Systems, Nov. 2024, (Fig. 15c)
  - The 2<sup>nd</sup> IEEE-Iran Section and IGMC General Meeting, Demand Side Management in Modern Power Systems, Feb. 2024, (Fig. 15d)
  - Flexible Distributed Energy Resources, Virtual webinar by Prof. Gevork B. Gharehpetian, Oct. 2023, (Fig. 3)
  - Cybersecurity and Resilience Enhancement of Smart Grids Webinar, Oct. 2023. (Fig 15b)
  - Fault Location in a Power Network Using Time Reversal Theory Webinar
- Electronics Chapter Periodical Meetings

### Publications Committee

This committee has two international magazines, which provide context to expand the section's performance in this field. As a responsibility, this committee evaluates the current publications and expands the scope and context of the future ones.

### Young Professionals Committee

This committee regularly performs audio clips with famous successful academics and engineers around the globe to share the keys and ideas with the younger generation. By now, the audio clips from experts from Western universities and Persian universities have been performed.

### Ethics Committee

This committee is responsible for sharing engineering ethics and the IEEE ethics program with the students.

- As of the main activity:  
The **First Student Ethics Competition** performed by the section:  
The first IEEE Student Ethics Competition in Iran took place on December 21st, coinciding with the Ikram Conference at the Master Jabehdar Maralani Hall, Faculty of Electrical and Computer Engineering, Technical Faculties of the University of Tehran. After the collection of team presentation files by the competition supervisors, the official opening ceremony commenced at 10 a.m. with a speech by Prof. Reza Faraji Dana, the head of the Ethics Committee of IEEE Iran Section. Teams presented their prepared materials for 10 minutes each and answered judges' questions within 5 minutes. After the presentations, judges conducted final evaluations and selected the top two teams. The closing ceremony, featuring a speech by Prof. Hossein Askarian Abyaneh, the esteemed chair of the IEEE Iran Section, concluded with the announcement of results and appreciation for the judging team, winning teams, and the competition's executive staff, Dec. 2023 (Fig. 9)

### Industry

#### Internship Opportunities and Student-Oriented Activities

- The IEEE Iran Section elects the chair of the Industrial Relations Committee every two years. Eng. Pakravan is in charge of the 2023-2024 term, and he is currently an Ambassador for Industry in AFI.
- We have 15 internship opportunities this year, and some of them are now active as full-time employees at top companies in the country.
- Support for the Amirkabir University of Technology Co-Op project.
- The Industrial Relations Committee page is active and is available on the Iran Section website. Every piece of content related to our industry will be stored and published on our web page. Also, we refer to the published content via all sections and student branches social media to make the content available to students and the public faster and easier.

- Our communication with students is through the Iran Section website, so every piece of content related to the industry will be stored and published on the Industrial Relations Committee page. Also, we have listed a place for job opportunities on Job Site, <https://jobsite.ieee.org.ir/>. Job Site is for those who are seeking job opportunities and also for companies that have job offers or opportunities (employers and employees).
- Supporting student activities.
- Supporting and funding student visits and trips.
- Sponsored and funded two IEEE Iran Section annual meetings.
- Holding online events or webinars for students:
- Discover the Golden Point Webinar: with the approach of developing personal abilities in order to discover the secret of success and job satisfaction, by Dr. Saeed Saadat, Director of Tehran Institute of Technology

### **Mentorship**

- Job Site is a place for those who require mentorship, have any questions, or need any help with career design and opportunities. We are trying to connect expert people (with high experience from well-known companies and trade unions, such as the Iranian Telecommunication Industries Syndicate) to individuals who are in need of consulting.
- IEEE Iran Section IRC is formed of top, well-known, and highly experienced industry individuals as well as active students and volunteers who are available to help and consult section student members in their relevant fields.

### **Engagements with Companies**

- ❖ Establishing a connection between the Iran section and the Payvast monthly (the most authoritative monthly in the field of communication) and publishing a history of the IEEE Iran Section in one of its chapters
- ❖ Encourage and promote industry people and active organizations to volunteer cooperation with the IEEE Iran Section.
- ❖ Our active industry partnerships are well-known companies and trade unions in the country, which have already been mentioned in our reports; however, they are listed as follows:
  - Iranian Telecommunication Industries Syndicate
  - Paya Communication Industries
  - Mobinnet Telecommunication Company
  - Nian Electronic Co.
  - Faraz Co.
  - R&D Development Company (Teta)
  - Azmoon Keyfiat Co.
  - Karen Antennas Technology Co.
- ❖ We have six signed partnerships this year, as follows:
  - Crouse Manufacturing Industries
  - Pooyandegan Rah Saadat Co.
  - Avid Net Technology
  - <https://psp.ir/power>
  - Faravid Co.
  - Monenco Iran Consulting Engineers

### **Partnership with Niroo Research Institute**

- 1) Planning and implementing training courses in the field of development and promotion of IEEE standards related to the field
- 2) Tavanir company activities. Conducting education-oriented courses, and holding seminars, specialized courses and educational workshops in the field
- 3) Development and promotion of IEEE standards related to the field of activities of Tavanir Company Monitoring and evaluation of scientific and educational activities related to IEEE standards related to the field of the company's activities
- 4) Tavanir Cooperation in preparing, compiling and implementing the educational plan of the fields related to the development and promotion of IEEE standards
- 5) Related to the field of activities of the Tavanir Company.
- 6) Commitments of Tavanir Company

- 7) Need assessment and final approval of trainings related to IEEE standards related to the field of activities of Tavanir Company.
- 8) Communication of IEEE standards required by Tavanir Company in line with the development and promotion of standards. Supervision of the implementation of relevant trainings.
- 9) Supporting and following up on the timely implementation of training courses from the research institute.

#### **Partnership with Communication and Information Technology Research Institute**

According to the public relations report of the Communication and Information Technology Research Institute, in order to increase the level of cooperation in the international field as well as the optimal use of scientific and research capacities, a memorandum of cooperation was signed between the Research Institute of Communication and Information Technology and the International Society of Electrical and Electronics Engineering (IEEE) in Iran. According to this news, in this memorandum, the cooperation of the parties in the fields of education and research in order to increase the international communication of the country and also support student activities is emphasized. Dr. Razavizadeh, the head of the Research Institute of Communication and Information Technology, at the signing ceremony of this memorandum, while considering this memorandum as important and emphasizing the acceleration of the implementation of the provisions of the contract, said: Considering the international position of the IEEE Association of Iran, this memorandum will help the research institute to increase our international interactions. Also, this association can benefit from all the facilities available at the research institute for the implementation of its projects. He also emphasized student support and added that this memorandum will allow us to witness synergy in the field of student support with the cooperation of the Electrical and Electronics Engineering Association of Iran, so that this support will eventually lead to the development of the country. In the other part of the ceremony, Prof. Vahid Ahmadi, the head of the World Electrical and Electronics Engineering Association of Iran, expressed a selection of the activities of this association and how it can help the research and scientific department of the Research Institute of Communication and Information Technology and emphasized: In the IEEE Association, the Iranian section is attended by prominent scientific figures of the country, and this has caused this association to have a high capacity at the international level. He added: Today, in the scientific community of the country, international communication is of great importance, and this is an issue that has been challenged. He also added: Currently, there is a lot of potential capacity in the international section of the ICT Research Institute and the IEEE Association, which can be turned into reality with this memorandum and proper planning, and we hope that by creating a joint committee and with the presence of the representatives of the parties, it will be possible to These great capacities took an important step towards the development of the country. In the end, while appreciating the research institute's performance in supporting students, Prof. Ahmadi said: The Research Institute of Communication and Information Technology has a very good position among the scientific community of the country, including students and professors, so that all the professors and students today use this research institute. They are known as supporters who determine the policy of their projects and theses. It should be noted that the IEEE section of Iran, with a history spanning more than half a century, consists of 14 specialized committees, 58 student branches in the country's universities, and consultants and experts in the industry, which in recent years has been able to carry out scientific activities with the support of the Communications and Information Technology Research Institute. Develop your domestic and international research in all fields.

#### **Entrepreneurship**

- Participation of industries to request the need for training in relevant standards
- Participation of industries in the SmartData Challenge

#### **Events with Industry**

- Awarding two industrial awards in the 14<sup>th</sup> IEEE Iran Section Awards Ceremony, Feb 2024, (Fig. 1)
- Holding a standard training course in Tavanir Co. Dec. 2023.
- Inviting successful entrepreneurs for specialized panels and lectures at IEEE Iran Section annual meetings and sponsored conferences.
- Supporting the booths of the IEEE Iran Section at conferences and exhibitions
- Financial support of industrial companies for IEEE Iran Section sponsored conferences, Oct 2023. (Fig. 12)
- Holding the Synergy of Industry and University Virtual Panel, The 8th Iranian International Conference on Engineering Education, Amirkabir University of Technology

#### **Activities done by IEEE Iran Section IRC since the last report**

- Committee report in the Q1 AFI meeting in 2023
- Sending the committee report to AFI
- Liaise with other committees and affiliated groups to increase interactions



- Holding international communication meetings in the field of industry in Region 8
- Encourage and promote industrial people and active organizations to cooperate voluntarily with the IEEE Iran Section
- Committee report for the Q4 AFI meeting (2023)
- Digital System Roadmap in Electrical Engineering and Predicting Its Future Role in Domestic and Foreign Industries Webinar

### Activities since the last report

**IEEE Iran Section** has done the following main activities:

- Attending IEEE Sections Congress 2023, Ottawa, Canada, Aug. 2023
- Attending the 121st IEEE Region 8 Committee Meeting in Ottawa, Canada, Aug. 2023
- Meeting with Prof. Saifur Rahman, the former IEEE president for the Iran section on problem solving, Aug. 2023, (Fig. 26)
- Meeting with Dr. Antonio Luque, the former IEEE Region 8 Director, and presenting the IEEE Iran Section Strategic Plan
- Planning for the Iran section with the R8 strategic plan, Ottawa, Aug. 2023.
- Attending the 120th IEEE Region 8 Committee Meeting in Bucharest, Romania, Mar. 2023.
- Establishing a Planning Committee
- Establishing the IEEE Iran Section Life Member Affinity Group (LMAG)
- Planning to create a new chapter in Biomedical Engineering, 2023.
- Memorandum of agreement between the IEEE Iran section, the IEEE Turkey section, and the United Arab Emirates regarding:
  - Relationship with Industry
  - Student exchange
  - Holding a women's conference
  - Holding joint seminars and conferences
- Initial coordination for joint cooperation with Oman
- The joint session of the IEEE Iran Section with the IGMC aims to foster bilateral collaborations, Aug 2023, (Fig. 27)
- Development of activities for YPs, WiE, and the other Affinity Groups
- Participate in the development of national standards
- Communication of the student sector of the Industrial Relations Committee with the R8 committees, such as AFI
- Receive performance reports of committees
- Holding the 14<sup>th</sup> IEEE Iran Section Awards Ceremony, Feb. 2024, (Fig. 1)
- Holding the 21<sup>st</sup> Annual Meeting with the Executive Committee of the IEEE Iran Section and Student Branches' Counselors, Feb. 2024, (Fig. 2)
- Funding awards
- Compilation of regulations for holding webinars and workshops
- Review conference regulations
- Planning for the annual ceremony
- Approve and support the Ethics Challenge Contest
- Support for conferences and workshops (Figs. 15, 18, 19, 20, 22)
- Financial support for the membership of the students

### Planned activities

Our future planned activities are as follows:

- Promotion of activities in international cooperation (participation in R8 committees)
- Invite prominent international researchers to introduce their program and activities in person or online
- Holding regional and international events in Iran, (Fig. 15)
- Efforts to develop and promote science and educational centers in the country
- Promote and develop industry relations to increase the growth of technology at the national level
- Cooperation with scientific research institutions and scientific associations
- Develop and promote the level of student activities
- Increasing the number of student branches in the country to expand the student network
- Introducing and promoting national awards in the fields of education, research, student branches, and volunteer activities
- Increase IEEE membership
- Preparation of Iran Section strategic plan, action plan, and roadmap
- Development of Technical Chapters' activities to expand the network of faculty and student members in the country

### How Region 8 can be of help to your Section, members, and activities

As we mentioned in our previous reports, we are facing the following issues:

- Our members, especially students, cannot make it, which causes a decrease in membership statistics. R8 can help us convince headquarters to set the membership fee based on our local currency.

### Executive Team

Full Name	Affiliation	Email Address
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### The 14<sup>th</sup> IEEE Iran Section Awards Ceremony

In the beginning, the host welcomed all prestigious guests from around the world and started the session officially and Prof. Vincenzo Piuri, director of R8 serving as the opening speaker of this event, expressed his appreciation for the initiatives undertaken by the Iran section. The IEEE Iran Section 2023-2024 Board of Directors was introduced to the audience through a video clip. It was time to introduce the IEEE Iran section awards, and a video clip to give specific details about each one was played. Then the IEEE Iran Section Awards and Recognition Committee Chair started to give information about nominees for the 2023 awards.

### List of awards and recipients is as follows:

- **Lifetime Teaching Award:** Mehdi Karrari, from Amir Kabir University of Technology
- **Lifetime Research Award:** Majid Sanaye Pasand, from University of Tehran

- Prof. Hakkak Award: Babak Hossein Khalaj, for Sharif University of Technology
- Prof. Jabehdar Award: Masoud Shafiee, from Sharif University of Technology
- Prof. Caro Lucas Award: Majid Nili Ahmad Abadi, from the University of Tehran
- Prof. Fakhraei Award: Omid Shoaee, from the University of Tehran
- Prof. Anvari Award: Mansour Jamzad from Sharif University of Technology
- Lifetime Industry Achievement Award: Hossein Mohseni, from Sharif University of Technology
- Top Entrepreneurs Award: Esmail Sanaie, from Sharif University of Technology
- Outstanding Student Branch Counselor Award: Saeid Akhavan from the University of Tehran
- Women in Engineering Award: Bahare Akhabari, from K. N. Toosi University
- Young Researcher Award: Armin Salimi Badr, from Shahid Beheshti University
- Best Ph.D. Thesis Award: Zohreh Sadat Miripour, from the University of Tehran
- Best M.Sc. Thesis Award: Danesh Amani, from Tarbiat Modares University
- Best B.Sc. Thesis Award: Fateme Zare, from K. N. Toosi University
- Best Student Branch Award: Ferdowsi University, Counselor: Dr. Majedi

For the last, the final words were from Eng. Mojgan Azizi, the chair of the IEEE Iran Section Web Development Committee and the conductor of the 14<sup>th</sup> IEEE Iran Section Awards Ceremony Executive Team. She admired the relentless and unparalleled efforts of team members and noted that there would not have been such a fabulous event without them. Finally, a memorable group photo was taken with all the prestigious guests.

Pictures

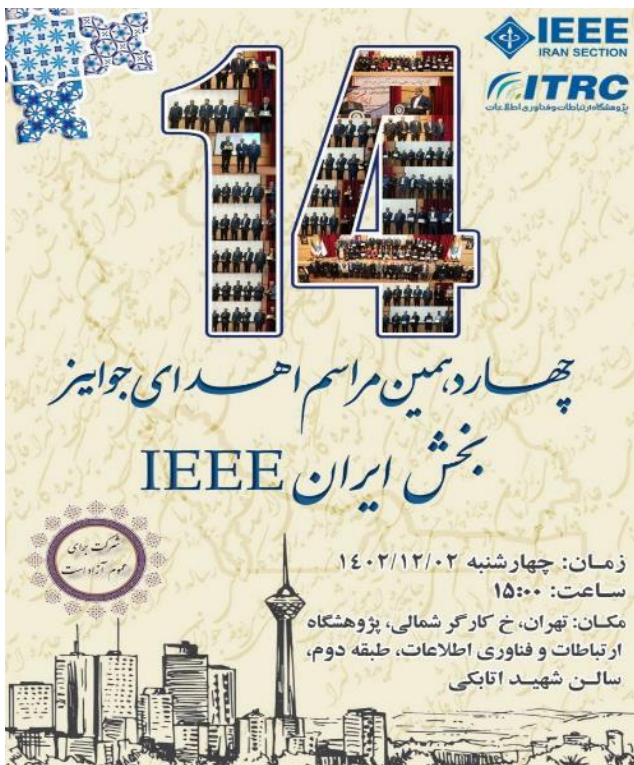


Fig. 1. The 14<sup>th</sup> IEEE Iran Section Awards Ceremony



Fig. 2. Student Branches General Meeting

**IEEE**  
Virtual Webinar: **Flexible Distributed Energy Resources**  
Speaker: **Prof. Gevork B. Ghahrepetian**

The concept "flexibility" has been introduced to address challenges related to uncertainty in power generation (supply side), uncertainty in energy availability (demand side), the need for changing power systems planning methods, and the need for changing power systems operation approaches. In order to increase the flexibility of power systems to reliably and cost-effectively manage the variability and uncertainty of demand and supply across all relevant timescales, Distributed Generation (DG) units and Energy Storage Systems (ESSs) can be utilized. The interconnection of such systems to power grids can be via the DC-link of Custom Power devices (CUPs). The result of this interconnection, called "Flexible Distributed Energy Resources", can affect the flexibility of power systems by controlling energy exchange, active power and voltage, and simultaneously improving power quality indices.

In this presentation, challenges related to uncertainties in power generation and energy availability, as well as changes in power systems operation and planning methods, will be discussed. Discussions on power systems flexibility will be given, and then, it will be shown that it is possible to connect DG units and ESSs to power grids using the DC-link of Distribution Static Compensator (D-STATCOM), Dynamic Voltage Restorer (DVR) and Unified Power Quality Conditioner (UPQC), and control active power injected by DG units and ESSs and simultaneously improve power quality indices.

Date: **October 16, 2023**  
Time: **10:00 a.m. to 11:30 a.m. (UTC-05:00) Eastern Time (US and Canada)**  
Host: **University of New Haven, Zeta Rho, co-sponsored by Power and Energy Systems Research Laboratory**  
Registration is required, but it is free of charge. Zoom meeting information will be provided to the registered participants one day before the event.  
Registration link: <https://events.uconn.edu/org/n/365992>  
More information can be found here: <https://pesr.lab.com/news/webinar-4/>

Fig. 3. A Technical Webinar by Prog. Ghahrepetian

**ITRC** **IEEE**  
IRAN SECTION  
A series of scientific meetings of the ICT Research Institute

**Win-Win Strategies:  
Leveraging Game Theory  
and Mechanism Design to  
Enhance Multi-agent  
Systems**

Speaker:  
  
**Dr. Farzaneh Farhadi**  
Dr. Farzaneh Farhadi is an Assistant Professor of Computer Science at Aston University, England, since January 2022. Previously, she held the prestigious position of a Royal Society Fellow at Imperial College London. Her academic journey began at Sharif University of Technology, Iran, where she earned dual degrees in BSc in Electrical Engineering and Mathematics (2010), followed by an MSc in Electrical Engineering (2012), and she successfully completed her PhD in Electrical Engineering in 2018. Her career has spanned various continents, including a role as a Research Fellow at the University of Michigan in Ann Arbor, USA, and more recently, as a Lecturer at the University of Tehran, Iran. Dr. Farhadi's research focuses on multi-agent systems, game theory, incentive mechanism design, and strategic learning.

► **Date: November 27, 2023 ( 6 Azar 1402 )**  
► **Time: 14:00 - 15:30 (IST)**

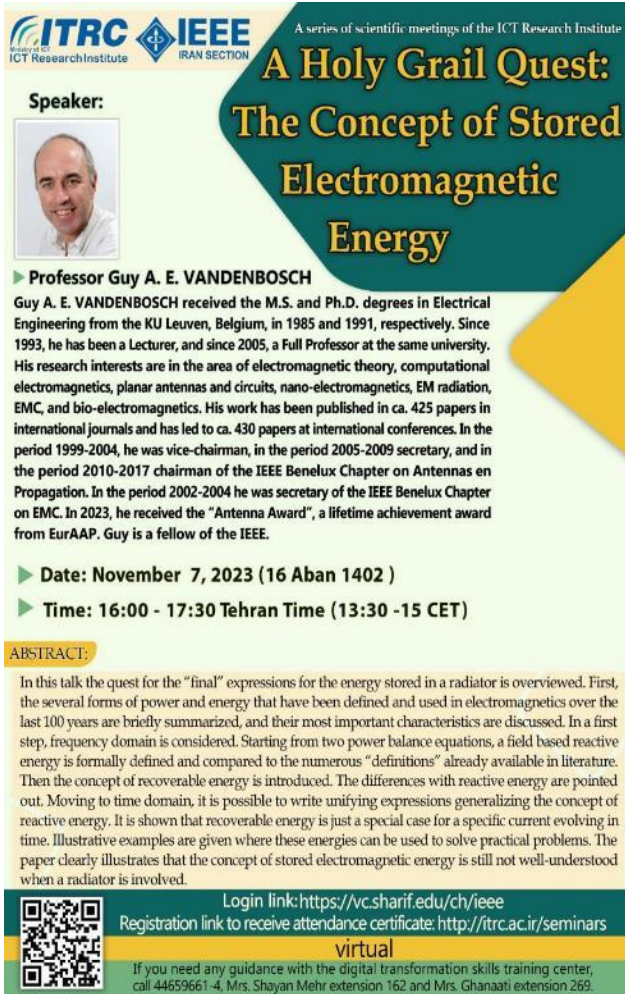
**ABSTRACT:**  
In this presentation, we delve into the exciting world of mechanism design and its pivotal role in enhancing multi-agent systems. Mechanism design, often considered the inverse of game theory, offers a unique perspective on optimizing system outcomes to benefit all stakeholders. We will begin by introducing mechanism design and discussing key concepts within this field. As we progress, we will showcase real-world examples of how the integration of mechanism design and game theory can elevate the performance of multi-agent systems. Through these practical illustrations, we will illustrate how mechanism design empowers us to create win-win scenarios, where the desired outcome becomes mutually advantageous for both system designers and every individual agent within the system. Join us to explore the strategic interplay of these concepts and unlock the potential for achieving harmonious and efficient multi-agent systems.

Login link: <https://vc.sharif.edu/ch/ieee>  
Registration link to receive attendance certificate: <http://itr.ac.ir/seminars>

**virtual**

If you need any guidance with the digital transformation skills training center, call 44659661-4, Mrs. Shayan Mehr extension 162 and Mrs. Ghaniati extension 269.


Fig. 4. Technical Lectures hosted by IEEE Iran Section



**ITRC** **IEEE IRAN SECTION** A series of scientific meetings of the ICT Research Institute

## A Holy Grail Quest: The Concept of Stored Electromagnetic Energy

**Speaker:**



► **Professor Guy A. E. VANDENBOSCH**

Guy A. E. VANDENBOSCH received the M.S. and Ph.D. degrees in Electrical Engineering from the KU Leuven, Belgium, in 1985 and 1991, respectively. Since 1993, he has been a Lecturer, and since 2005, a Full Professor at the same university. His research interests are in the area of electromagnetic theory, computational electromagnetics, planar antennas and circuits, nano-electromagnetics, EM radiation, EMC, and bio-electromagnetics. His work has been published in ca. 425 papers in international journals and has led to ca. 430 papers at international conferences. In the period 1999-2004, he was vice-chairman, in the period 2005-2009 secretary, and in the period 2010-2017 chairman of the IEEE Benelux Chapter on Antennas and Propagation. In the period 2002-2004 he was secretary of the IEEE Benelux Chapter on EMC. In 2023, he received the "Antenna Award", a lifetime achievement award from EurAAP. Guy is a fellow of the IEEE.

► **Date: November 7, 2023 (16 Aban 1402)**

► **Time: 16:00 - 17:30 Tehran Time (13:30 - 15 CET)**

**ABSTRACT:**

In this talk the quest for the "final" expressions for the energy stored in a radiator is overviewed. First, the several forms of power and energy that have been defined and used in electromagnetics over the last 100 years are briefly summarized, and their most important characteristics are discussed. In a first step, frequency domain is considered. Starting from two power balance equations, a field based reactive energy is formally defined and compared to the numerous "definitions" already available in literature. Then the concept of recoverable energy is introduced. The differences with reactive energy are pointed out. Moving to time domain, it is possible to write unifying expressions generalizing the concept of reactive energy. It is shown that recoverable energy is just a special case for a specific current evolving in time. Illustrative examples are given where these energies can be used to solve practical problems. The paper clearly illustrates that the concept of stored electromagnetic energy is still not well-understood when a radiator is involved.

Login link: <https://vc.sharif.edu/ch/iee>  
Registration link to receive attendance certificate: <http://itrc.ac.ir/seminars>  
virtual

If you need any guidance with the digital transformation skills training center, call 44659661-4, Mrs. Shayan Mehr extension 162 and Mrs. Ghanaati extension 269.

Fig. 5. Technical Workshop on Electromagnetic Energy



**ITRC** **IEEE IRAN SECTION** A series of scientific meetings of the ICT Research Institute

## هوش مصنوعی مولد در حوزه هنر و طراحی لباس و مد

ارائه دهندگان:

			
دکتر شقایق نادری مسئول محور هنر و طراحی لباس و مد	دکتر رضا عزمی عضو هیئت علمی دانشگاه الزهرا	دکتر احمد نیک آبادی عضو هیئت علمی دانشگاه صنعتی امیرکبیر	دکتر محمد شهرام معینی دبیر کمیته علمی رویداد

**محورها:**

- معرفی کلی رویداد، نحوه ایجاد تیمهای کاری، تعامل با اساتید و منتورها، زمان بندی و ...
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- معرفی کاربردهای هوش مصنوعی مولد در طراحی لباس و مد

**تاریخ:** شنبه ۱۴۰۲/۰۶/۱۱

**ساعت:** ۹ الی ۱۲

**لینک ورود به جلسه:**  
<https://vc.sharif.edu/ch/iee>

gaiw.itrc.ac.ir  
gaiw@itrc.ac.ir

Fig. 6. Event of Artificial Intelligence in Fashion



**ITRC** **IEEE IRAN SECTION** A series of scientific meetings of the ICT Research Institute

## Spatio-temporal Modeling in Neuroscience through Interpretable Machine Learning

**Speaker:**



► **Dr. Reza Abbasi-Asl**

Dr. Abbasi-Asl is an Assistant Professor in the Department of Neurology and the Department of Bioengineering and Therapeutic Sciences at UCSF. He is a Weill Neurohub Investigator and serves as the director of Data Analytics and Visualization at the Weill Institute for Neuroscience at UCSF. He received his PhD and MSc in Electrical Engineering and Computer Sciences at UC Berkeley in 2018. He is the recipient of the Eli Jury Award from UC Berkeley, in 2018, the May J. Koshland Fund in Memory of H.A. Jastro Award from UC Berkeley Graduate Division in 2016, the Excellence Award in Biomedical Engineering from Sharif University of Technology in 2013, and the Excellence Award in Electrical Engineering from Tehran Polytechnic in 2010. He is currently a core member at the UCSF Neuroscape labs, Bakar Computational Health Sciences Institute, Kavli Institute for Fundamental Neuroscience, UC Berkeley/UCSF Bioengineering and Computational Precision Health, and UCSF Bioinformatics graduate groups. His research is supported through funding from NIH National Institute of Mental Health, NIH National Institute of Aging, Weill Neurohub, Sandler Program for Breakthrough in Biomedical Research, UCSF Innovation Ventures, and Google.

► **Date: December 4, 2023 (13 Azar 1402)**

► **Time: 10:00 - 12:00**

► **Venue: Dr. Abedi Conference Hall, 3th floor Aborayhan Building, Amirkabir University of Technology**

**ABSTRACT:**

In this talk, I will outline our quest to investigate the role of advanced computational tools in understanding brain functions and its related disorders. More specifically, I will present solutions based on interpretable machine learning to (1) integrate multi-modal spatio-temporal data collected from the brain (and body) in both microscopic and macroscopic resolutions, (2) predict functions of biological systems in different resolutions, and (3) determine the functional differences across neurological disorders.

Login link: <https://vc.sharif.edu/ch/iee>  
Registration link to receive attendance certificate: <http://itrc.ac.ir/seminars>  
In person and virtual

Fig. 7. Technical Workshop on Machine Learning



**1ST EPISODE**  
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New Leaf Energy  
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**3RD EPISODE**  
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**Dr. Mohammad Noshad**  
Co-Founder and CEO of Shyld AI  
Harvard University

**Hosts :** Dr. Aa.Ghavifekr  
Ashkan Safari  
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**4th EPISODE**  
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**Director :** Arman Teimouri

**Prof. Mohammad Jamshidi**  
University of Texas  
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**5th EPISODE**  
**Inspiring Journeys**

**Host :** Dr. Amir. A. Ghavifekr  
**Director :** Arman Teimouri

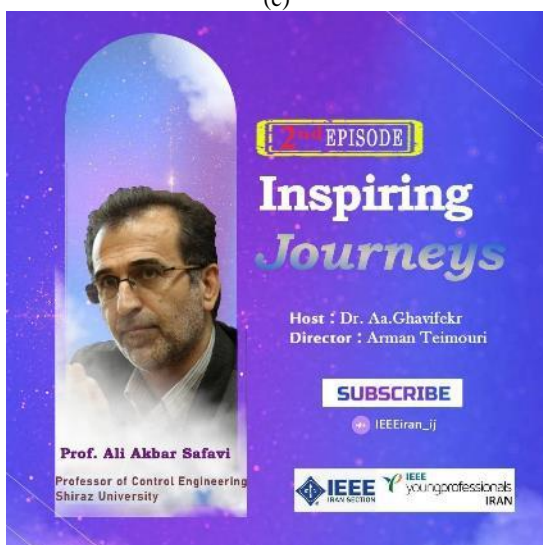
**Prof. Mahmood Vaghoubi**  
Shiraz University  
Fellow Member of the  
Academy of Sciences

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**2nd EPISODE**  
**Inspiring Journeys**

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**Director :** Arman Teimouri

**Prof. Ali Akbar Safavi**  
Professor of Control Engineering  
Shiraz University

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(e)



**Data-Driven Control of Micro-Climate in Buildings:  
An Event-Triggered Reinforcement Learning Approach**

**Monday 24 January 11 AM - 12:30 PM (UTC+3:30)**

**Ashkan Haji Hosseinloo**  
received his undergraduate degree in Mechanical Engineering from Amirkabir University of Technology in 2009. He received his M.Eng. (2012) and Ph.D. (2018) degrees in Mechanical Engineering from Nanyang Technological University, NTU (Singapore) and Massachusetts Institute of Technology, MIT (USA), respectively.  
He is currently a postdoctoral associate at MIT Laboratory for Information and Decision Systems (LIDS) and Institute for Data, Systems, and Society (IDSS). Ashkan's research is in the field of dynamical systems and control with a hybrid model-based and data-driven approach, and with applications in sustainable energy, smart cities, and smart mobility and transportation. Ashkan is the author of more than 20 journal and conference papers, and is the recipient of many prestigious awards, including Insight Data Science Fellowship, Dae Hwang Award in Mechanics, Martin Fellowship in Design, and Graduate Exploration Fellowship from MIT, and ST Kinetics and DSO scholarships from Singapore.

Smart buildings have great potential for shaping an energy-efficient, sustainable, and more economic future for our planet as buildings account for approximately 40% of the global energy consumption. The future of smart buildings lies in using sensory data for adaptive decision making and control that is currently glossed by the key challenge of learning a good control policy in a short period of time in an online and continuing fashion. To tackle this challenge, an event-triggered – as opposed to classic time-triggered – paradigm, is proposed in which learning and control decisions are made when events occur and enough information is collected. Events are characterized by certain design conditions and they occur when the conditions are met, for instance, when a certain state threshold is reached. By systematically adjusting the time of learning and control decisions, the proposed framework can potentially reduce the variance in learning, and consequently, improve the control process. We formulate the micro-climate control problem based on semi-Markov decision processes that allow for variable-time state transitions and decision making. Using extended policy gradient theorems and temporal difference methods in a reinforcement learning set-up, we propose two learning algorithms for event-triggered control of microclimate in buildings. We show the efficacy of our proposed approach via designing a smart learning thermostat that simultaneously optimizes energy consumption and occupant's comfort in a test building.

**IN HYBRID FORMAT**  
**Venue:** Faculty of Electrical and Computer Engineering, University of Tabriz, Tabriz, Iran  
محل برگزاری: دانشکده مهندسی برق و کامپیوتر دانشگاه تبریز

(f)

**Towards Decarbonized Energy Systems: The Key Role of Energy Storage**

Sunday | 6 March  
5:30 PM - 6:30 PM (UTC+3:30)

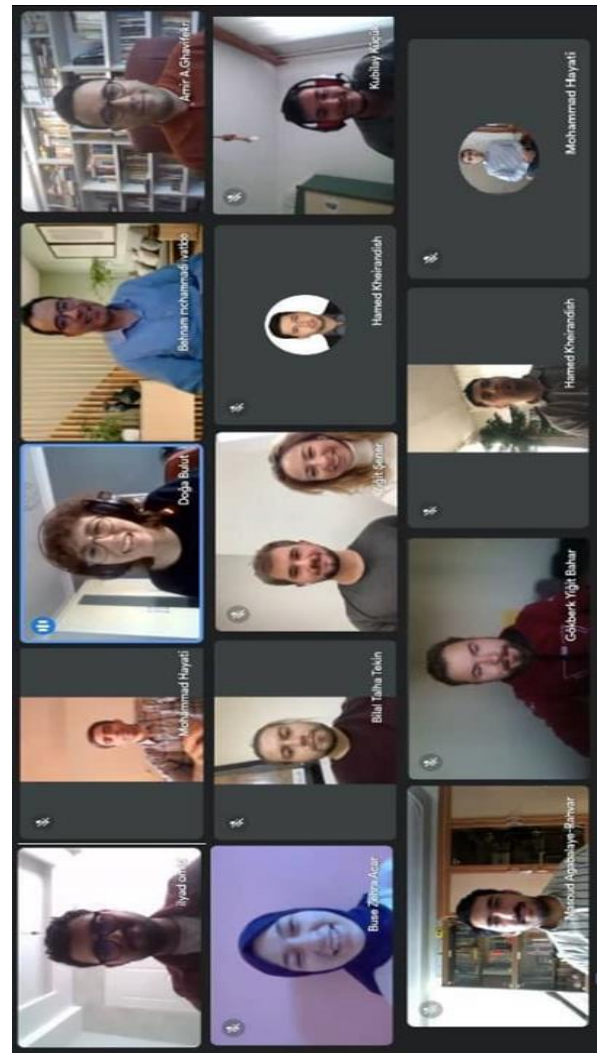
**Speaker:**

**Mehdi Jafar** (Ph.D., Michigan Technological University, Electrical Engineering, 2018) is a Postdoctoral Associate in the Laboratory for Information and Decision Systems (LIDS) at Massachusetts Institute of Technology (MIT). He was also a visiting scholar at the Norwegian University of Science and Technology (NTNU) in Fall 2019. He is working on the device- and system-level analyses of advanced energy storage solutions for electricity and transportation applications and renewable energy.

His research aims at improved mathematical modelling and economic analysis of renewable energy and energy storage technologies using experimental techniques and computational — linear optimization, machine learning, Bayesian networks — algorithms. He has authored more than 48 journal papers and conference presentations in the power and energy field. He has received outstanding research fellowship (2016) and outstanding teaching award (2017) at Michigan Tech, and his research was featured in the MIT News (2020). He is a member of the committee for diversity, equity, and inclusion (DEI) at MIT Department of Electrical Engineering and Computer Science (EECS).

In this workshop, I discuss the current status and future trends of decarbonization efforts in electricity and transportation systems. I elaborate on the critical role of energy storage in achieving low-carbon energy systems with a focus on developing enhanced representations of battery energy storage technologies. I show that a) most decarbonization studies investigating the role of ESSs do not consider ambitious emissions targets like the IPCC's 1.5°C goal, b) the role of ESSs in low-carbon electricity pathways rely heavily on local contexts c) from a technology perspective, duration and capital cost are the main factors in assessing the viability of each ESS technology, d) virtual ESS solutions can provide similar flexibility without high hardware investment requirements but rather through improved algorithms for optimization, control and measurements, and e) planning models that do not account for the technical characteristics of ESS technologies are inadequate to assess technology tradeoffs.

(g)



(h)

Fig. 8. Young Professionals Committee events





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- [www.ieee.org.ir](http://www.ieee.org.ir)
- <https://icrom.ir/Sec2023>
- [T.me/IEEE\\_Ethics](https://t.me/IEEE_Ethics)






**Event Information:**

- **Date:** 21 December 2023
- **Location:** University of Tehran ICROM 2023
- **Registration deadline:** Monday, 23 October 2023






Fig. 9. Ethics Challenges

## Data-Driven Control and Its Applications

**Professor Alireza Karimi**  
Alireza Karimi was Assistant Professor at Electrical Engineering Department of Sharif University of Technology in Teheran from 1998 to 2000. He is currently Professor of Automatic Control in the Institute of Mechanical Engineering of EPFL. He was an Associate Editor of European Journal of Control from 2004 to 2013. His research interests include closed-loop identification, data-driven controller tuning approaches and robust control with application on mechatronic systems and electrical grids.



**Date: December 25, 2023 ( 4 Dey 1402 )**  
**Time: 10:05 - 12:00**  
**Venue: Dr. Abedi Conference Hall, 3th floor Aborayhan Building, Amirkabir University of Technology**

**Abstract:**  
As computational power and sensor technology continue to improve, data-driven control methods are emerging as promising alternatives to traditional model-based control, especially for systems with complex or uncertain dynamics. Data-driven control methods directly optimize control performance based on real-time data, bypassing the two-step process of model identification and model-based controller design. This presentation focuses on leveraging frequency-domain data to design fixed-structure controllers with H<sub>2</sub> and H<sub>∞</sub> performance for generalized systems represented by Linear Fractional Representation (LFR) through convex optimization. This method can be used to design centralized, decentralized, and distributed controllers for both continuous and discrete-time systems. The effectiveness of the proposed approach is demonstrated through applications in robust passivity-based controller design for grid-connected converters and data-driven position-dependent controller design for Cartesian robots.

In person and virtual

**Login link: <https://vc.sharif.edu/ch/ieee>**




Fig. 10. Workshop on Data-Driven Control



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**۱۰۰۰ بلیط با تخفیف ۵۰٪** برای اعضا IEEE Region 8  
برای حضور در کنفرانس و رویدادها

رویدادهای مربوط به IEEE Region 8

- "Technical Seminar on Deep Tech Powered by IEEE" on October 16
- "IEEE R8 AI Doctorate Symposium" on October 20
- (If you are interested in presenting your published paper on AI at the symposium please fill this form <https://forms.gle/9YpFraboyUDR8wVTR>)

لینک عضویت و ثبت نام در IEEE  
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برای دریافت کد تخفیف مشخصات و شماره عضویت IEEE را به آدرس های زیر ایمیل نمایید.  
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[office@ieeer8.org](mailto:office@ieeer8.org)

IEEE IRAN SECTION  
Membership Development Committee

Fig. 12. Section Support to Attend GITEX 2023

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پژوهشگر و منتور در حوزه توسعه فردی و سازمانی
- دکتر سمیرا نجارزاده  
پژوهشگر و منتور در حوزه توسعه زنان

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- بسترهای توسعه بانوان
- راهبردهای بانوان برای توسعه فردی
- مطالبات بانوان

تاریخ: سه شنبه ۱۴۰۲/۰۹/۲۱  
ساعت: ۱۴ الی ۱۴:۳۰  
لینک ورود به جلسه: <https://vc.sharif.edu/ch/ieeer>

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gaiw@itrc.ac.ir

Fig. 13. WIE Entrepreneurship Webinar

سلسله نشست های علمی مجمع الکترومغناطیس و فوتونیک

**یک مرکز تحقیقاتی استثنایی رعد و برق در کوه‌های آلپ سوئیس**

ارائه دهنده:

دکتر فرهاد رشیدی

(M'93-SM'02-F'10) مدرک MS، مهندسی برق و دکتری خود را از موسسه فناوری فدرال سونیس، لوزان، سوئیس، به ترتیب در سال ۱۹۸۶ و ۱۹۹۱ دریافت کرده است. پروفیسور رشیدی در حال حاضر عضو هیئت مشورتی ملی سوئیس در اتحادیه بین المللی علوم رادیویی است. او جوایز متعددی از جمله جایزه دستاورد فنی IEEE EMC در سال ۲۰۰۵، جایزه کمیته فنی CIGRE در سال ۲۰۰۵، منال بلوندل ۲۰۰۶ از انجمن مهندسی برق، الکترونیک، فناوری اطلاعات و ارتباطات فرانسه (SEE)، جایزه برگر در سال ۲۰۱۶ در کنفرانس حفاظت در برابر صاعقه، جایزه بهترین مقاله IEEE Transactions در EMC، و جایزه Motohisa Kanda در سال ۲۰۱۷ برای بیشترین استناد مقاله IEEE Transactions در ۲۰۱۶-۲۰۱۲ (EMC) را کسب کرده است.

زمان: چهارشنبه ۱۴۰۲/۱۱/۱۸ (7 فوریه 2024)  
ساعت: ۱۶:۰۰-۱۴:۳۰

چکیده:

داده‌های تجربی گسترده‌ای که توسط پروفیسور کارل برگر و تیمش در بالای دو برج ابرز دقیق در مونت سان سالواتوره در جنوب سوئیس از دهه ۱۹۵۰ تا ۱۹۷۰ ثبت شده است، منجر به یک توصیف آماری جامع از پارامترهای جریان صاعقه شد. نتایج به دست آمده توسط آنها از محدوده پت‌های تکولوژیکی ابرز در آن زمان رنج می‌برد. از سال ۲۰۱۰، این سیستم به طور مکرر به روز شده و گسترش یافته است. در حال حاضر، داده‌های مرتبط با برخورد صاعقه به برج در شش سایت مختلف جمع‌آوری شده است. این مرکز مجیز به یک سیستم اندازه‌گیری جریان، سه ایستگاه میدان الکترونیک، یک آسب میدان الکترواستاتیک، دو سنسور اشعه ایکس، یک دوربین پرسرعت و چهار دوربین کند است. در ده سال اول بهره‌برداری از ایستگاه بیش از ۱۰۰۰ فلاش ثبت شد. داده‌های به دست آمده بزرگترین مجموعه داده موجود تا به امروز برای فلاش‌های منفی رو به بالا را تشکیل می‌دهند. داده‌های به دست آمده اجازه می‌دهد تا فرکانس و مکانیسم‌های فیزیکی زیربنایی آن را بهبود بخشد. در این ارائه، مروری بر نتایج و توصیفی از نتایج برجسته به دست آمده از تجزیه و تحلیل داده‌های ثبت شده در طول دهه اول بهره‌برداری آن ارائه می‌گردد. ما یک کمپین آزمایشی اخیر را که در سال ۲۰۲۱ برای ارزیابی امکان هدایت و شروع رعد و برق با استفاده از لیزرهای یفدرت انجام شد، شرح خواهیم داد.

لینک ورود: <https://vc.sharif.edu/ch/ieeer>

مجازی

Fig. 14. Electricity Research in Switzerland Alps

**هجدهمین کنفرانس بین المللی حفاظت و اتوماسیون در سیستم های قدرت**  
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ساعت ۱۰ الی ۱۲  
رویداد به صورت حضوری می باشد  
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**IEEE IRAN SECTION**  
**WEBINAR**  
**ENHANCING POWER GRID RESILIENCE AGAINST WILDFIRE**  
ویبنار

افزایش تاب آوری شبکه برق در برابر آتش سوزی

دوشنبه ۱ آبان ۲۳ OCTOBER  
ساعت ۲۰ الی ۲۱:۳۰ به وقت ایران (IRST)  
PACIFIC TIME (PT) 9:30 - 11:00 TIME  
UTC 16:30 - 18:00 TIME

**ABSTRACT: WE JOURNEY THROUGH...**

- Power grid resilience amidst increasing wildfire threats
- Implementing short-term power shutdowns (PSPS) for immediate hazard reduction
- Expansion plans with new transmission lines, adjustments to existing ones, and harnessing DERs
- Using robust optimization to handle unpredict ability in DER performance and wildfire occurrences
- Integrating data and machine learning for targeted de-energization
- The success of the proposed model under extreme wildfire scenarios

**BIOGRAPHY**  
DR. SAEED MANSHADI  
Assistant Professor at San Diego State University

کسب اطلاعات بیشتر:  
QR CODE  
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(b)

**کاربردهای هوش مصنوعی در شبکه های قدرت مدرن**  
(AI Applications in Modern Power Systems)  
1<sup>st</sup> IEEE-Iran Section and IGMC General Meeting

نخستین نشست مشترک مجمع قدرت بخش ایران و شرکت مدیریت شبکه برق ایران

محورهای نشست

۱. شناخت هوش مصنوعی و کاربرد آن در سیستم های قدرت
۲. پاسخگویی بار، مدیریت مصرف و پیش بینی بار به کمک هوش مصنوعی
۳. پایش وضعیت در شبکه های قدرت به کمک هوش مصنوعی
۴. کاربرد هوش مصنوعی در پایش لحظه ای و برخط شبکه های قدرت
۵. کاربرد هوش مصنوعی در بهره برداری و راهبری شبکه های قدرت
۶. کاربرد هوش مصنوعی در حفاظت محلی و گسترده شبکه های قدرت
۷. کاربرد هوش مصنوعی در کنترل و ارزیابی پایداری شبکه های قدرت
۸. ارزیابی امنیت فیزیکی و سایبری شبکه های قدرت به کمک هوش مصنوعی
۹. کاربردهای موق و پیاده سازی شده پرمیای هوش مصنوعی در صنعت برق

زمان: چهارشنبه ۱۷ آبان ۱۴۰۲ ساعت ۸:۱۵ الی ۱۲:۱۵  
لینک رویداد:  
<https://www.skyroom.online/ch/gm.ieee-igmc-gm>

شماره تماس دبیرخانه  
۰۲۱۸۵۱۶۲۴۶۰ & ۰۲۱۸۵۱۶۲۴۶۵

کسب اطلاعات بیشتر  
<https://gm.igmc.ir>

(c)

**IEEE IRAN SECTION POWER CHAPTER**  
**دومین نشست مشترک مجمع قدرت بخش ایران و شرکت مدیریت شبکه برق ایران**  
2<sup>nd</sup> IEEE-Iran Section and IGMC General Meeting

**مدیریت مصرف در شبکه های قدرت مدرن**  
Demand Side Management in Modern Power Systems

محورهای نشست

- راهبردها و فناوری های مدیریت سمت تقاضا
- مدیریت مصرف در شرایط تعرفه تکلیفی
- نقش پاسخگویی تقاضا در امنیت شبکه
- سیاست های تنظیم گری در مدیریت مصرف و نقش بازار برق
- توسعه کسب و کارهای بهینه سازی و مدیریت مصرف
- مدیریت مصرف در حضور منابع تولید تجدید پذیر، ذخیره سازها و خودروهای الکتریکی
- پیش بینی داده راه الگوهای تقاضا
- مزایای اقتصادی و زیست محیطی مدیریت مصرف

کسب اطلاعات بیشتر:  
مراجعه به سایت نشست به نشانی  
<https://gm.igmc.ir>

زمان:  
چهارشنبه ۱۴۰۲/۱۱/۱۸  
از ساعت ۸:۱۵ صبح الی ۱۲:۱۵ ظهر

شماره تماس دبیرخانه:  
۰۲۱۸۵۱۶۲۴۶۵ & ۰۲۱۸۵۱۶۲۴۶۰

لینک رویداد:  
<https://www.skyroom.online/ch/gm.igmc.ir/ieee-igmc-gm>

(d)

Fig. 15. Session and IGMC General Meeting



(a)



(b)

Fig. 16. WIE Professional Development

**IEEE IRAN SECTION**

IEEE Women in Engineering  
*Wie*

I AM HONORED TO PRESENT THE IEEE-IRAN WOMEN IN ENGINEERING AWARD 2023 TO DR. BAHAREH AKHBARI IN RECOGNITION OF HER EXCEPTIONAL ACHIEVEMENTS IN THE FIELD OF TELECOMMUNICATIONS AND HER NOTABLE EFFORTS TO PROMOTE WOMEN IN ENGINEERING.

**PROFESSOR ZOHREH AZIMIFAR**  
CHAIR, WIE-IEEE IRAN

Fig. 17. WIE Award Recipient of the Section

UNIVERSITY OF SCIENCE AND CULTURE

WITH THE SUPPORT OF  
**IEEE IRAN SECTION**

INTERNATIONAL CONFERENCE ON  
**WEB RESEARCH**

**10<sup>th</sup>**

**ICWR 2024**  
24-25 APRIL  
TEHRAN, IRAN

**CONFERENCE AREA:**  
Machine Learning and Deep Learning in Web \* Semantic Web, Web Mining, and Web Analytics \* Cloud Computing Platforms \* Web Security & Privacy \* Internet of Things \* Web Quality Assessment \* E-commerce, E-Business, and E-marketing \* Web Retrieval & Content Analysis \* Behavioral Analysis & Personalization \* Social Networks Analysis \* Human-Computer Interaction \* Blockchain and Cryptocurrency \* Web Sociology & Ethics \* Web Communications & Media \* Web Software Platforms

**IMPORTANT DATES:**  
Full paper submission **Extended** 1 March 2024  
Notification of review result 29 Mar 2024  
Final submission of accepted papers 13 Apr 2024  
Registration deadline 15 Apr 2024

Tel: +98 21 44252070 | Telegram: @webresearch | Site: [iranwebconf.ir](http://iranwebconf.ir) | Email: [icwr@usc.ac.ir](mailto:icwr@usc.ac.ir)

Submission to **IEEE Xplore**  
Indexed by **ISC** and **SID** Databases  
Selected Papers Will Be Published in International Journal of Web Research (ISC indexed)

**ISC ACECR SID**

Fig. 18. ICWR2024 Conference

## نهمین کنفرانس بین المللی فناوری و مدیریت انرژی

### The 9<sup>th</sup> International Conference on Technology and Energy Management



www.ictem.ir

**موضوعات کنفرانس**

- سیستم‌های انرژی در شبکه‌های هوشمند و شهر هوشمند
- فناوری‌های انرژی‌های تجدیدپذیر، فرآیندها و کاربرد آنها
- فناوری‌های بهره‌برداری از انرژی‌های تجدیدپذیر
- نقش انرژی در علم مواد و فناوری ساخت
- انرژی در صنایع، گاز و انرژی هسته‌ای
- انرژی در کشاورزی
- فناوری‌های نوین تبدیل انرژی
- روش‌های نوین مدیریت انرژی
- تجهیزات و سیستم‌های انرژی

**تاریخ‌های مهم**

- خبری ارسال می‌گردد: ۱۴۰۳ بهمن ۱۴۰۳
- آخرین مهلت ارسال مقالات: ۳۰ آذر ۱۴۰۳
- آخرین مهلت ثبت‌نام در کنفرانس: ۱۴۰۳ دی ۱۴۰۳

**در حاشیه ضمیمه‌ها**

- برپایی: ۲۵ و ۲۶ بهمن ۱۴۰۳
- برپایی: ۲۷ و ۲۸ بهمن ۱۴۰۳
- نمایشگاه تخصصی و نمایشگاه محصولات
- معرفی پانل‌ها، سخنرانی‌ها و سخنرانی

مکان برگزاری: دانشگاه علم و فناوری مازندران  
روان برگزار: ۲۵ و ۲۶ بهمن ۱۴۰۳

دارای امتیاز نظام ارجاع برای ثبت نام کنندگان در کنفرانس و کارگاه‌ها

دیرخانه دانشگاه مازندران: ۰۱۱-۳۴۲۵۶۴۴  
Email: 911-ictem@conferences.azir.ac.ir

دیرخانه مرکزی انجمن انرژی تهران: تهران، خیابان غربی، بلوار شهید بهمن، پلاک ۱۰۰  
www.irarad.ir • ۰۲۱-۶۶۹۱۸۱۸۸

Fig. 19. ICTEM2024



The Robotics Society of Iran Presents:  
The 10<sup>th</sup> RSI International Conference on Robotics & Mechatronics

15-17 November 2022, K. N. Toosi University of Technology, Tehran, Iran.

### Conference Highlights

AI Grand Challenge



Surgery tool detection and tracking on ARAS-Farabi Video Dataset

Keynote Speaker



Prof. Sunil K. Agrawal  
Columbia University

Creativity and Idea Contest/Exhibition



**Conference Topics:**

- ✓ Aerial and Underwater Robotics
- ✓ Bio-inspired Robotics
- ✓ Cable Robots
- ✓ Cognitive Robotics
- ✓ Collaborative Robotics
- ✓ Control Systems
- ✓ Humanoids
- ✓ Intelligent Robotics and Systems
- ✓ Legged Robots, Manipulation
- ✓ Mechatronics Systems
- ✓ Medical Robotics
- ✓ MEMS
- ✓ Micro and Nano Robots
- ✓ Modeling and Identification
- ✓ Motion Planning and Learning
- ✓ Opto-Mechatronics
- ✓ Parallel Robotics
- ✓ Probabilistic Robotics
- ✓ Reconfigurable Robots
- ✓ Rehabilitation Robotics
- ✓ Robot Calibration
- ✓ Robot Control
- ✓ Robotic Platforms
- ✓ Service and Field Robotics
- ✓ Tele-robotics
- ✓ Visual Robotics
- ✓ Wheeled Mobile Robots
- ✓ Social Robotics
- ✓ New and emerging frontier fields on Advanced Intelligent Robotics and Mechatronics

All accepted and presented paper will be included in IEEE Xplore, and thereby indexed in WoS and Scopus Databases.

Creativity and Idea Contest/Exhibition

Conference Office: The Academy of Sciences, Higher Education, Tehran, Iran.  
Conference Secretariat: K. N. Toosi University of Technology, Faculty of Electrical Engineering, Tel: +98-21-8406-2222.  
RSI Secretary: Tel: +98-21-6675-3117.  
Email: info@icrom.ir  
URL: https://icrom.ir

Fig. 20. ICRoM 2023 Conference

## دوره آموزشی حضورى FPGA مقدماتى

مدربان: مهندس محمدى

بیشترى از سرفصل دوره

آموزش زبان توصيف سخت‌افزارى VHDL  
راه‌اندازى سرى FPGA سرى Xilinx  
راه‌اندازى ادوات کاربردى مثل LCD، کلید، Vsegment  
راه‌اندازى USART  
راه‌اندازى Keyboard Scanner  
روش استاندارد و بهينه نوشتن ماشین‌هاى حالت  
پياده‌سازى واسط ارتباطى VGA

شروع دوره: ۲۴ مرداد ماه  
روزهاى برگزارى: شنبه ۱۳۰۰ قى ۱۷:۰۰

ثبت‌نام و اطلاعات بیشتر:  
www.nirasystem.com  
۰۲۱ ۶۶۹۱۸۱۸۸-۹



جهت ثبت نام و هماهنگى‌هاى بیشتر به شماره  
ذيل پيام دهيد: ۰۹۹۰۹۴۵۰۹۷۹

IEEE TVU

## LinkedIn

### آشنایى با شبکه اجتماعى لینکدین

سید پارسا حمصی

دانشجوی کارشناسی ارشد  
الکترونیک دیجیتال  
مدرس هیئت محصلین  
و ریاضیات  
عضو کمیته فنی مسابقات  
ریسک‌کتاب آزاد ایران

سرفصل‌ها:  
نحوه عضویت در لینکدین  
نحوه ساخت حرفه‌ای پروفایل  
آشنایى کامل با محیط لینکدین  
ساخت صفحه شرکت و گروه حرفه‌ای  
رزومه‌هاى کارى و پژوهشى  
نمونه‌هاى کارى  
آشنایى با کاربرایى لینکدین

هزینه کارگاه: رایگان  
بهورت مجازى

تاریخ برگزارى: ۱۴۰۳ / ۰۶ / ۲۴  
ساعت: ۱۸:۰۰-۲۰:۰۰

IEEE TVU

شاخه دانشجویی IEEE دانشکده فنی و حرفه ای پسران شهرکرد  
با همکاری شاخه دانشجویی IEEE دانشگاه شهید بهشتی برگزار می کند.

## آموزش مقدماتی ایندیزاین

یادگیر، خلاق باش، طراحی کن

**مدرس دوره:** مهیار محبی نیا (کارشناسی ارشد مهندسی برق - الکترونیک)

**سر فصل ها:**

- آشنایی با نرم افزار ایندیزاین
- ایجاد سند
- مدیریت صفحات
- کار با لایه ها
- کار با متن و گرافیک
- اصول کار با رنگ
- استایل های متن
- ایجاد خروجی پروژه

هزینه کارگاه: رایگان  
بصورت مجازی  
تاریخ برگزاری: ۱۴۰۲/۰۶/۲۳  
ساعت: ۱۷:۰۰-۱۸:۰۰

جهت ثبت نام و هماهنگی های بیشتر به شماره ۰۹۱۳۵۷۴۴۵۴۹ زینل پیام دهید.  
IEEE\_TVU

## کارگاه آموزشی

توصیف سخت افزار به زبان VHDL بر روی FPGA

**مدرس دوره:** مهیار محبی نیا (کارشناسی ارشد مهندسی برق - الکترونیک)

### از صفر تا اسطوره ی VHDL

تاریخ شروع: ۱۳۸۶/۰۲/۱۲

**روزهای برگزاری:** یکشنبه ها: ۱۰ الی ۱۳، چهارشنبه ها: ۱۰ الی ۱۳

**مشخصات دوره:** ۴۰ ساعت آموزش پروژه محور، برگزاری دوره به صورت حضوری و برخط

**سر فصل های دوره:**

- آشنایی کلی با تفاوت های ASIC و FPGA
- آشنایی کلی با ساختار زبان VHDL
- آشنایی با ساختار و اجزای Entity
- آشنایی با ساختار و اجزای Architecture
- آشنایی با دستورات Sequential Statement
- آشنایی با نحوه تعریف و استفاده از Component
- آشنایی با نحوه نوشتن TestBench
- آشنایی با Attribute
- آشنایی با SubProgram و ...

جهت ثبت نام وارد لینک زیر شوید:  
<https://b2n.ir/p87359>

اهدای گواهی از طرف IEEE بخش ایران در صورت قبولی در امتحان پایان دوره \*\*

Fig. 21. Cooperation in holding student workshops

In the name of God

## ICEE 2023

May 9-11, 2023

Iranian Association of Electrical Engineering Sciences and permanent Secretariat of ICEE Conference are honored to host the ICEE 2023, which will be held in physical, virtual or hybrid format. This conference gathers annually researchers and practitioners in all fields of Electrical and Computer Engineering to discuss the latest developments and exchange their novel accomplishments. ICEE 2023 welcomes original unpublished paper submissions from researchers in academia and industry describing innovative contributions in the scope of the conference. In addition to the oral presentation of contributed papers, the ICEE 2023 will feature workshops, panel discussions, key note speeches and exhibitions.

**Topics of Interest**

- Electronics
- Computer
- Power
- Power and Telecommunications industry
- Control
- Biomedical Engineering
- Telecommunications

**Important Dates**

Full paper submission: 2022/12/06 (December 06, 2022)  
Notification of paper acceptance: 2023/02/04 (February 04, 2023)  
Camera ready and video submission: 2023/03/06 (March 06, 2023)

**Paper Submission Guidelines**

- Submitted manuscripts should demonstrate original unpublished research in the topics interest.
- All submitted papers must be prepared based on the given format in the conference website.
- Paper submission is only available via the conference website.
- As previous ICEE conferences, upon approval of the conference by IEEE, English accepted articles will be submitted to IEEE, for inclusion in the IEEE Xplore digital library.
- Oral presentation is mandatory for publication of papers in the proceeding and their inclusion in the IEEE Xplore.

**Address of 31<sup>st</sup> International Conference on Electrical Engineering Secretariat and Secretariat of the Association**  
612, Electrical Engineering Department, Aboureyhan Building, Amirkabir University of Technology (Tehran Polytechnic), 350, Hafez Ave., Tehran, Iran, Po.Box: 15875-4413  
Tel: +98-21-66485857  
Websites: <http://iceeconfer.ir> Email address: [iceeconfer@aut.ac.ir](mailto:iceeconfer@aut.ac.ir)

**Contact Information**  
**Address of the Iranian Association of Electrical Engineering Sciences**  
201, Electrical Engineering Department, Aboureyhan Building, Amirkabir University of Technology (Tehran Polytechnic), 350, Hafez Ave., Tehran, Iran, Po.Box: 15875-4413  
Tel: +98-21-66495433 Websites: <http://iaees.aut.ac.ir>

Fig. 22. 32<sup>nd</sup> International Conference on Electrical Engineering

هوش مصنوعی مولد برای بانوان

Fig. 23. “Economic, Artistic, and Research Facilitating Ideas based on Generative Artificial Intelligence for Women”, Events





Fig. 24. Generative AI for Women (Supported by the Ministry of ICT), December 2023



Fig. 25. Persian text analysis in social networks event



Fig.26 Meeting with Prof. Saifur Rahman, IEEE Sections Congress 2023, Ottawa



Fig. 27. IEEE Iran Section joins hands with IGMC for bilateral collaboration development